DETAILED ACTION

Election/Restrictions

1.   Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I.   Claims 1-13, drawn to "image monitoring using plurality of digital still

         camera", classified in class 382, subclass 107.

   II.   Claims 14-19, drawn to "a camera unit comprising a second nonvolatile

         memories and a random access memory", classified in class 348,

         subclass 159.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a

single combination. The subcombinations are distinct if they do not overlap in scope

and are not obvious variants, and if it is shown that at least one subcombination are

separately usable. In the instant case, subcombination II has separate utility such as

using it as a standalone image monitoring devices for monitoring remote areas. See

MPEP § 806.05(d).

       The examiner has required restriction between subcombinations usable together.

Where applicant elects a subcombination and claims thereto are subsequently found

allowable, any claim(s) depending from or otherwise requiring all the limitations of the

allowable subcombination will be examined for patentability in accordance with 37 CFR

1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a

continuation or divisional application is anticipated by, or includes all the limitations of, a

claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2.   During a telephone conversation with Mr. David McClaughry on 5/11/2009 a provisional election was made with traverse to prosecute the invention of "image monitoring using a plurality of camera units operatively connected to each other and to a central controller using wireless communications", claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Examiner Notes

3.   Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially

teaching all or part of the claimed invention, as well as the context of the passage as taught by

the prior art or disclosed by the examiner

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1-2, 6, 8 and 9 are rejected under 35 U.S.C. 102 (b) as being anticipated

by Ramirez ET al (US 6,476,858).

6.   As to claim 1, Ramirez et al teaches and image monitoring system (system wherein a

plurality of video cameras may be monitored from a local or remote location, column 4, lines 19-

21) comprising:

 A central controller; and a plurality of digital still camera units operatively connected to the

central controller (figure 8A; column 4, lines 54-column 5, lines 5; see also figure 4 that shows

10-camera system),

Wherein at least one of the camera units comprises an image sensor (302, figure 8A);

a motion detector operatively connected to the image sensor that causes the

image sensor to receive image data when motion is detected (motion detection devices, column

4, lines 19-28 ; note that Input devices such as motion sensors and switches may be monitored

across the optically isolated inputs 403 or over the TTL inputs 404.) ; a micro controller

operatively connected to the image sensor and to the motion detector (313, figure 8A); a first

nonvolatile memory operatively connected to or included in the micro controller (the I2C control

311 is a serial controller that communicates with serial non-volatile memories such as I2C NV

memory 305, column 5, lines 6-15);

 and computer readable program code stored on the first memory for

causing the micro controller to determine whether the received image data

should be transmitted to the central controller, wherein the central controller

then determines whether the received image data should be transmitted to a

monitoring station (the software running on 1a-1d called the VS client controls the

hardware referenced in the block diagram of figure 8, column 4, lines 41-44).

As to claim 2, Ramirez et al teaches the image monitoring system of claim 1, wherein the

plurality of camera units transmit image data wirelessly to the central controller (figure 7;

column 4, lines 50-53).

As to claim 6, Ramirez et al teaches the image monitoring system of claim 1, wherein at

least one of the camera units is battery operated and comprises direct memory access circuitry

between an image sensor and a second nonvolatile memory (column 5, lines 5-14).

As to claim 8, Ramirez et al teaches the image monitoring system of claim 1, wherein the

monitoring station forms a component of the image monitoring system, and wherein the

monitoring station includes human personnel who further analyze the images to determine

whether an alarm should be sent to an authority (see figure 9B).

As to claim 9, Ramirez et al teaches the method for image monitoring using a plurality of

digital still camera units operatively connected to each other and to a central controller using

wireless communications, the method comprising, the steps of: detecting motion of a moving

object using a motion detector included in at least one of the camera units (FIG. 9C is a detailed

block diagram of the motion detect algorithm employed to detect motion from the video

cameras; triggering, following the detection of motion of the moving object, an image sensor

included in at least one of the camera units to receive an image of the moving object (The

digitized information from each video camera is alternatively analyzed using image processing

techniques and to trigger alarm events. Other alternatives provide ON/OFF signals from devices

such as infrared sensors, motion sensors, alarm signals or cameras with built-in motion detection.

To sense ON/OFF signal states the software constantly monitors digital I/O logic until a signal

activates, generating an alarm event. Once the alarm event occurs, the digitized camera image

may then be saved in a database, or, alternatively, transmitted over a network or Internet to one

or more remote locations, figure 8A); determining whether the received image should be

transmitted wirelessly to the central controller by analyzing the image

using a micro controller included in at least one of the camera units and

operatively connected to the image sensor (column 4, lines 41-column 5, lines 65) and

determining whether any images received at the central controller from at least one of the camera

units should be transmitted to a monitoring station (column 5, lines 15-23)

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

8.   Claims 3-5, 10-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ramirez et

al (US 6,476,858) in view of Rajeev et al (CA 2.242.322) .

While Ramirez meets a number of the limitations of the claimed invention, as pointed out

more fully above, Ramirez fails to specifically teach the a mesh networking protocol enabling

image data to be routed indirectly and wirelessly through one or more of the camera units to the

central controller and that at least one of the camera units further comprises a microphone and

the use of both a color and black and white image sensors to improve light sensitivity.

Specifically, Rajeev et al. teaches the use uses a video camera to capture video images

and output them in standard video format. A digital video decoder is coupled to the output of the

video camera, to convert the video images into digital data, with a capture rate that corresponds

with the standard format rate of digital video. This is combined with a motion detection system

(6, 7), and fitted into a tamper-proof enclosure. Moreover, Rajeev teaches in figure 2 a video

camera 1 captures video image in one of eight different types of video formats which includes

regular and high resolution EIA, CCIR, NTSR, and PAL analog video standards. The use of

microphone or the use of color or black and white image sensors helps in improving the low light

sensitivity. Rajeev teaches the system includes a programmer interface such as serial port which is operative to input and output program and diagnostic information by using a remote arm/disarm that allow the user to activate/deactivate the device without having to contact it. It would have been obvious to one of ordinary skill in the art to implement the microphone, and the different kind of image sensors in Rodriguez in order to provide a cost effective embedded surveillance system with a user interface and on-screen display so that it is operable without any dependence on a PC or other external operational unit, effectively eliminating the need for external cabling and the other costs and problems associated with PC's (page 6,lines 11-16)Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claim 4, Rajeev et al teaches an image monitoring system of claim 1, wherein at least one of the camera units further comprises a microphone (microphone 3, page 12, line 1, figure 1a).

As to claim 5, Rajeev et al teaches an image monitoring system of claim 1, wherein at least one of the camera units further comprises both a color and a black and white image sensor to improve low-light sensitivity, wherein both image sensors are operatively connected to a single high-speed DMA bus (pages 8, lines 21-page 9, line 1-23).

As to claim 10, Ramirez et al teaches the method for image monitoring of claim 9, wherein the central controller further comprises a mesh networking protocol enabling image data to be routed indirectly and wirelessly through one or more of the camera units to the central controller (column 4, lines 50-53).

As to claim 11, Ramirez et al teaches the method for image monitoring of claim 9, further comprising the step of storing images received by the image sensor in a memory unit of a camera unit using direct memory access (video storage means, and wherein the predetermined function includes digitally compressing and storing the video images from at least one of the cameras, 305, figure 8A; see also Rajeev et al figure 2 (8)).

Allowable Subject Matter

9.   Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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